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AUTHOR Aquila, Frank D.
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ABSTRACT

This report identifies the nature and extent of the dropout problem nationally and its extent and cause at the Kansas City, Missouri, Vocational-Technical (Vo-Tech) Center. Section One, an examination of the national dropout problem, is an extensive literature review. Deficiencies in secondary vocational programs are investigated. Suggestions to improve the structure and operation of vocational and adult education are given. The key issues in vocational education from the perspective of the business community are discussed. The values and functions of vocational education are detailed. Characteristics of vocational dropouts are identified. Section Two presents findings of a year-long review of student records; interviews with teachers, counselors, administrators, and staff; and student and dropout interviews to determine the extent and cause of the Vo-Tech Center dropout problem. Findings are grouped into these major categories: recordkeeping problems, building problems, reasons for attending the Center, and problems with the Center. Suggestions for improvement include the following: improve counselor contacts, coordinate school and transportation schedules, provide alternatives, develop building policies, improve public relations, coordinate in-house programs, hire a social worker/counselor, and better use job placement. Appendixes include a change agenda for vocational education, actions to facilitate business/industrial cooperation with vocational education, and references. (YLB)

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# WHITHER VOCATIONAL EDUCATION:

# The Dropout Problem And Its Impact

# In Kansas City And In The Nation

Frank D. Aquila
Associate Professor
Cleveland State University
1983 East 24th Street
School of Education
1406 Rhodes Tower
Cleveland, Ohio 44115
(216) 687-4587

Summer, 1985

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## ABSTRACT

This research study had the dual purpose of identifying (1) the nature and extent of the dropout problem nationally and (2) the extent and cause of the dropout problem at the Kansas City, Missouri Vocational-Technical Center (Vo-Tech).

To examine the national dropout problem, an extensive review of the literature was conducted. Available data bases provided a rich source of information from which the suggestions, characteristics and implications were culled. The determination of the extent and cause of the Kansas City Vo-Tech Center dropout problem required an extensive involvement with building-level vocational educators and students. These findings were obtained from a year-long review of student records, interviews with teachers, counselors, administrators and staff. Student interviews were conducted with Vo-Tech students, general program students and dropouts. Follow-up studies were conducted by the researcher to validate all conclusions and recommendations.

This research clearly documented that to lessen the extent of the dropout problem at the Kansas City Vo-Tech Center (and probably at most other urban secondary vocational schools) the following actions need to be taken: (1) improve record-keeping; (2) define dropout; (3) improve home-school counselor to Vo-Tech counselor contacts; (4) do not penalize by pupil accounting methods; (5) coordinate school and transportation schedules; (6) provide pre-screening; (7) provide alternatives; (8) develop building policies; (9) involve other districts; (10) improve public relations; (11) coordinate in-house programs; (12) encourage positive staff-administration relations; (13) hire a social worker/counselor; (14) take the initiative; (15) better utilize job placement; (16) refine open enrollment.

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F.D.A. S-1985

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WHITHER VOCATIONAL EDUCATION:

The Vocational Dropout Problem And Its Impact

In Kansas City And The Nation

## SECTION ONE: THE NATIONAL PERSPECTIVE

### CHAPTER ONE: THE EXTENT OF THE DROPOUT PROBLEM

The economic and social impact of dropouts on the American economy has been assessed in various ways depending on the factors used to determine impact. Most would agree that the impact has been severe. Jones (1977) estimated that the loss to the nation associated with 25-34 year old males who had not completed high school was $71 billion to the federal government and $24 billion to local governments in lost income alone. Further, the welfare expenditure attributed to inadequate education was an additional $3 billion a year. Contrastingly, it would have cost only $40 billion to have had these 25-34 year olds complete high school (Mertens, 1982).

Further, more criminal activity is associated with those who drop out of high school (Novak and Dougherty, 1979). This is supported by police statistics which indicate that dropouts are six to ten times more likely to be involved in crime than in-school students (Jones, 1977). Not surprisingly, about 85 percent of the inmates in state prisons are school dropouts (O'Morrow, 1976.)

Researchers have used various characteristics to analyze and determine the extent of the dropout problem in high school. Weber et al. (1982) categorized the prototypical characteristics of potential dropouts using cognitive factors (e.g., academically below average), affective factors (e.g., low self-esteem), and other factors (e.g., low SES). Grasso and Shea (1979) proposed a model involving educational attainment that included: (1) social-economic status (SES), (2) residence at age fourteen,

(3) scholastic aptitude, (4) high school curriculum, and (5) educational aspirations. Based on a study using the NLS Youth data base, Rumberger (1981) identified a different set of variables significantly associated with dropping out. These included family background (e.g., mother's education), residence, and contextual factors (e.g., community unemployment rate).

## Secondary Vocational Programs

Among the most common deficiencies regarding secondary vocational programs are:

1. outdated knowledge and skills
2. dumping ground for less able students
3. curricula not competency-based
4. lack of performance measures
5. evaluation too infrequent
6. misconceived criteria used for evaluation
7. skills associated with the acquisition of jobs are not sufficiently taught
8. general education and vocational education curricula are separated instead of being integrated
9. supervision is misdirected (centers on preservation rather than improvement)
10. equipment and facilities - obsolete and inadequate (David, 1983, p. 13).

The bulk of the criticism of vocational education generally falls into five categories. These categories are: (1) inadequate collaboration between secondary and post-secondary education; (2) lack of coordination with other modes of providing occupational education and training; (3) failures in providing vocational education for all special needs students (e.g., lagging behind in developing specialized techniques and methods essential to be effective with some special needs students); (4) inability to be a responsive system; (5) lack of integration between general and academic curricula (Bartow, 1984, p. 3).

In urban districts (the primary focus of this vocational study) the dropout rates of vocational schools are consistently among the lowest of any high schools (Fiske, 1984). Interestingly, the New York State Department found that 70 to 80 percent of the competencies being taught are the same

whether the vocational area was food service or a secretarial program. Along the same line, a Cleveland, Ohio vocational study found lower unemployment among vocational program completers than among young people in the 16- to 19 years age bracket generally in Ohio (Robinson, 1984). Somewhat surprising, though, was the fact that fewer than half of those employees were working in jobs for which they had been trained in high school.* Not surprising was that Cleveland city vocational completers consistently had higher unemployment rates than their suburban counterparts. If validated, these might suggest limiting full-day programs because full-day training programs were associated in the data with higher training-related employment, as well as with higher overall unemployment, than were half-day vocational programs (Robinson, 1984).

Vocational programs are not effectively interrelated with high school academic programs. Traditionally, articulation between secondary and postsecondary vocational education has not been attained even though it has been discussed for years. High school occupational counseling also appears to be in need of review and improvement. Vocational education has just not been sufficiently responsive to changes in local, regional, and national economies, in technology, in the labor market demand and supply relationship, and in occupational skill requirements. There is documentation to substantiate the need for changes in program offerings, curricula, equipment and facilities, and teacher preparation. When such things occur, high school programs do students a disservice as well as misallocating all-too-scarce resources (Henry, 1983).

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*The limited funding of our Kansas City vocational study did not allow us to explore this important question in the depth we would have liked. But from our limited interview sample we did find confirmation of this datum.

Research findings (Washington D.C., 1981) have determined that:

(1) Both white and black female graduates from business and office programs do much better in the labor market than white and black female graduates of the general program. They do better with respect to employment, earnings, and occupational status.

(2) The differences between male graduates of high school vocational programs and of general programs are not as marked.

(3) Evidence provided by research on one body of longitudinal data shows that:

> One year after graduation, 53 percent of white and 43 percent of black male graduates of trade and industry programs--the occupational specialty with the largest male enrollment--are employed in jobs related to their training. White male graduates of trade and industry programs are employed a few weeks more in the first year of work than white male general curriculum graduates, and white male graduates of business programs have jobs with slightly higher occupational status one year after graduation than white male graduates of the general curriculum; however, these differences are not as marked four years after graduation.

(4) If the white male graduates of all vocational programs are compared with the white male graduates of the general curricula, with neither group having had any postsecondary education, the differences between them are relatively slight with respect to their labor force participation.

(5) There is strong evidence that secondary vocational education prepares students for relatively low prestige and low paying jobs, and that race and sex are more closely associated than curriculum with the subsequent employment status of students. (This should not be surprising, for the programs offered mainly serve to prepare students for semi-skilled rather than skilled work, and about two-thirds of all vocational education enrollees are not enrolled in occupationally-specific programs.)

(6) However, there is also evidence that positive earnings effects are found associated with male marketing and trade and female business and trade graduates (Mertens & Gardner, 1981).

(7) Another study strongly related to subsequent employment, but indicated that "high school vocational training" had no significant effects upon the "yearly labor force experience" of students (Meyer & Wise, 1979).

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*This finding was confirmed by our Kansas City study.

# CHAPTER TWO: IMPLICATIONS FOR CHANGE

## General Suggestions

Various suggestions have been proposed to improve both the structure and operation of vocational and adult education. The Education Commission of the States (1976) suggests the following change roles:

1. The role for education
    a. Reorganizing restrictive scheduling, curricular, and credit patterns
    b. Assigning full-time work-study coordinators
    c. Broadening both scope and intensity of such programs
    d. Using total community resources--other social service agencies as well as business and industry
2. The role for business and industry
    a. Providing appropriate work situations
    b. Arranging schedule flexibilities
    c. Implementing two-way personnel exchanges
    d. Employing career development coordinators
    e. Accepting these programs as a true partnership venture (p. 20)

Additionally, the Education Commission has published several other studies suggesting actions for organizations and agencies that want either to adopt new career education policies or to review existing policies. Among their suggestions are the following:

1. Review existing policy statements to determine the extent to which they reflect current priorities.
2. Consider the advantages of working with other groups to achieve common goals in policy areas.
3. Analyze and note similarities and differences in formally stated policies as a first step in facilitating productive, goal-oriented relationships.
4. Define terms clearly.
5. Review statements carefully in order to determine if they reflect a commitment to involvement in career education at the local, state, or national levels (Ahmann, 1979, p. 19).

Needed urban vocational education changes will require more than limited band-aid approaches. A series of structural changes are required. For example, high schools should become far more flexible in regard to program modification and innovation, scheduling and the use of mobile

programs and instructional facilities located outside of the school building.

Educators need to agree that the comprehensive high school be genuinely comprehensive. A truly comprehensive high school will improve quality. Even rural high schools can become more comprehensive by providing a more intensive vocational curriculum. Further, there needs to be greater coordination between comprehensive high schools and area vocational centers thus (1) extending the range of programs offered; (2) sharing of instructional facilities and pooling of transportation arrangements; (3) sharing of teachers district-wide; and (4) using local employers to operate forms of apprenticeship training (David, 1983).

Stronger links with business and industry can improve quality and correct deficiencies in secondary vocational programs. Effective partnerships between vocational education and business and industry would provide additional students, new teachers from training stations, up-to-date equipment, and effective supervision.

One way to improve the quality of occupational education is to substitute narrow, job-specific training for the educational vocational generalists. There are also needs for (1) improving programs of vocational exploration and guidance and counseling; (2) adopting the principle of individualized education plans for vocational students; and (3) expanding programs for personnel development.

There is little mystery about what needs to be done as well as what can be done. David (1983) sees the problem as mustering resources, energy, and the will for the doing. A powerful stimulus for redirection and reform of vocational education lies in making a habit of periodic assessments of every aspect of the enterprise. This includes local and state planning, the availability of resources and their use, to the competencies acquired by students, to classroom procedures and methods of instruction (p. 22).

## More Specific Suggestions

Extensive further research is needed to determine whether offering a wider variety of vocational education below the eleventh grade level will keep students in school who might otherwise drop out. A vocational research agenda should be based on non-theoretical problems of dropouts from vocational programs. Some comments regarding such problems as well as changes suggested by Mertens (1982) and selected others include:

1. Dropping out of high school and engaging in criminal behavior are also related to each other in some complex fashion. Interventions directed at the reduction of criminal behavior could have the effect of reducing high school dropout rates.

2. Individual characteristics appeared to be most influential in the determination of whether or not students would complete high school.

3. Raise students' self-esteem through counseling or other human relations training techniques.

4. Providing remedial instructional experiences that should raise the students' academic achievement, could consequently affect their self-esteem.

5. The dropout process for youth begins long before they reach the level of secondary education. If the problem is to be reduced, it is important that careful attention be paid to earlier levels of education. However, if students are in the secondary level already, intervention strategies must be devised to help them there. (Jones, 1973)

6. Prevention programs can be categorized into two types: (1) those that attempt to change the academic program in which the student is enrolled and (2) those that attempt to bring about behavior changes within the students. Some programs combine elements of both. (Novak & Dougherty, 1979)

7. Dropout-prone students need more understanding and sympathetic teachers who render individualized attention, additional counseling, and opportunities to participate in work-study programs. (Yates, 1979)

8. Schools that are effective with potential and actual dropouts share numerous features. Among the features identified are the following:

   a. A commitment from the school leadership that dropout prevention is a priority
   b. An instructional program that is (1) individually tailored to the learning needs and styles of different students,

and (2) advances hierarchically through a sequence of skills

c. A grading system that builds on success by connecting it to learning tasks set in accordance with students' achievement levels
d. Immediate feedback on performance
e. Career information that leads to job placement
f. A system of discipline that establishes a bottom line for penalties consistently enforced, rewards for observing rules, and flexibility for students with special circumstances (Hunt & Woods, 1979)

9. Effective dropout prevention programs must be based on a total and cooperative effort between the community and its educators. Through linkages with community agencies, such as business, industrial, and labor organizations, dropout prevention programs can provide participants with a range of experiences that can be of practical value in the process of the students' transformation into industrious and contributing citizens. (Wisconsin Vocational Studies Center, 1980)

10. Experimental programs show that there are things that the schools can do to reduce the numbers who leave. Efforts made to effect improvements in understanding between teachers and students contribute to tolerance, which aids students' persistence. When experimental programs are held in locations that are less structured than regular schools, dropout-prone students show gains in attendance and achievement.

## Business/Industrial Perspective

Elliman (1983) discusses the key issues in vocational education from the perspective of the business community. The availability of quality technical schools and universities is an important factor which is considered by the business community when evaluating the location for a factory. Unfortunately, the relationship between industrialists and educators has often operated in an environment of distrust. One thing Americans can learn from the Japanese is to maximize the potential of people. In reality, shouldn't the real role of vocational educators be to help their pupils to reach their maximum potential?

Elliman focuses on the need for continuous learning and growth pointing out that in his state--out of one hundred high school principals and counselors attending a recent conference, only two had ever been in an industrial plant; yet, these plants were the major employers of their students. If the student's first job when he or she leaves high school is

to sell his or her skills to someone, the school should train students to acquire those marketable skills. Business looks for people who are trainable and who have a positive attitude toward learning. Industry, therefore, needs the educational system to turn out trainable graduates, who know about industries and how they operate. Further, educators also needs to develop courses that will teach students how to handle, manage, or just work with other people. Teachers are often hesitant to request help from industry; yet, Elliman is confident that most industrialists are willing, even eager, to contribute time, energy and resources (pp. 5-7).

## Employability

The Johns Hopkins University Center for Social Organization of Schools (Education Daily, p. 4) report concludes that high schools provide training for only the lower job classifications in American business. Such positions require skills which should be gained at the elementary or middle school levels. A later National League of Cities report (Higher Education Daily, p. 2) contends that urban youths' lack of basic education and job skills is the largest single factor contributing to high urban youth unemployment. The largest urban areas rated the basic skills problem most severely. As expected, high school dropouts topped the list as the most perplexing jobless group. At least 75 percent of all the cities rated dropouts as at least a substantial problem and more than 40 percent called it their most severe category. Oakes (1981) suggested a contradiction by reporting that whereas minority males are not underrepresented in vocational education, they, along with low SES students in general, have been found to be over-represented in vocational education classes that prepare students for low-income and low status occupations (p. 23).

Collaboration is a necessity if improvement in vocational education is going to occur. It is shocking that

> (t)wo million young people leave formal education lacking skills adequate to enter the labor market at a level commensurate with their academic and intellectual promise. Many leave with no marketable skills whatever. Such fruitless educational effort wastes educational dollars. There is even greater loss in the lack of confidence and self-esteem and in the feeling of alienation these young people feel as so many of them drift toward becoming a future statistic in unemployment, welfare, and sometimes even crime. (McKnight, 1978, p. 41)

## CHAPTER THREE: FUNCTIONS AND VALUE OF VOCATIONAL EDUCATION

Although much has been claimed for vocational education, even advocates would not claim that it contributes to reducing poverty, youth unemployment, and juvenile delinquency. Yet, the benefits of vocational programs in an urban setting are numerous. These values and functions are detailed by David (1983) in a straightforward fashion:

1. Vocational education provides an alternate program of study for the substantial fraction of high school students who do not intend to go on to college and who, presumably, would have little or no interest in pursuing a wholly academic curriculum. The vocational curricula, therefore, serves to expand the range of educational opportunities for the young and may contribute significantly to holding a high proportion of students in school through to graduation. Because dropouts do less well in the labor market than high school graduates, the availability of an alternative vocational curriculum increases the chances of employment.

2. Vocational education also serves to contribute to the realization of more equal opportunities, even though the performance record is far from exceptional. Vocational programs, serve the special educational needs of students who are disadvantaged by disabilities of an economic, cultural, physical, emotional, and intellectual nature. The objective is to reduce the chances that such individuals will remain grossly and, perhaps, irreversibly handicapped throughout life in developing their potentialities and in making a living.

3. Vocational education provides students with the knowledge and skills needed to take and hold entry-level jobs. It provides students with an opportunity to acquire "saleable" occupational skills and prepares them for the world of work with employability skills, including sound work habits and values and providing them with a foundation for further occupational training on the job.

4. Vocational education also prepares students for pursuing further occupational education and training at the postsecondary level.

## CHAPTER FOUR: CHARACTERISTICS OF VOCATIONAL DROPOUTS

Weber and Silvani-Lacey (1983) have reviewed the available research regarding dropouts. While focusing on the need for basic skills they comment extensively on characteristics of the dropout, pointing out that the average performance of secondary vocational students on standardized measures of basic skills is somewhere between the thirty-fifth and fortieth percentiles. This is almost one-half standard deviation below that for all secondary students (p. vii). Additionally, the typical attainment of secondary vocational students is significantly lower than that of academic students and only comparable to the attainment of general students (p. vii). Other characteristics which have been identified include:

1. The average performance of potential and actual secondary school dropouts appears to be at or near the twenty-fifth percentile or at a grade equivalent level of 5.4 (p. viii).

2. The basic skills levels of high school dropouts average significantly lower than those of completers (p. viii).

3. When potential and actual dropouts are afforded the opportunity to participate in vocationally oriented programs that have an integrated basic skills component, their basic skills attainment will usually increase substantially (p. viii).

4. Research on reading shows a gap of two to five years between the reading ability of vocational students and the mean readability of vocational texts (Karnes and Ginn, 1976).

5. Approximately 90 percent of all high school-aged youths begin high school, approximately 30 percent of the students entering fifth grade will leave high school prior to graduation (Sewell, Palmo, and Maine, 1981).

Weber and Silvani-Lacey have also developed a comprehensive listing of the potential and actual factors possessed by students who drop out. These characteristics, while extensive, are most important and are therefore detailed into:

A. Potential Dropout Characteristics

1. Cognitive Characteristics

a. are at least one year behind their grade level in reading and mathematics achievement;
b. are academically below average and have a trend of declining grades;
c. exhibit a lack of goal orientation in school;
d. are classified as slow learners (IQs of 75 to 90) or have a mean IQ of 90; and
e. seldom question or reason critically.

2. Affective Characteristics

a. demonstrate failure syndrome by habitually refusing to try and by being easily discouraged;
b. manifest low self-esteem;
c. are categorized by teachers as uncooperative, inattentive, and unmotivated;
d. display an active dislike of school;
e. feel alienated, isolated, insecure, and inadequate;
f. do not participate in school affairs;
g. are socially immature; and are not accepted by teachers.

3. Other Characteristics

a. have poor attendance records;
b. are older than their grade level peers;
c. come from low socioeconomic backgrounds frequently accompanied by a lack of parental emphasis on the importance of education; and
d. have parents whose own educational attainment level is low.

B. Actual Dropout Characteristics

1. Cognitive Characteristics

a. score low on intelligence tests (mean IQ = 90);
b. have repeated at least one grade;
c. have limited academic success accompanied by poor academic performance; and
d. read poorly, have poor computational skills, and tend to show little or no improvement in either area.

2. Affective Characteristics

a. are loners and feel alienated from the school environment itself, from teachers and from peers;
b. are not accepted or respected by teachers;
c. tend to lack interest in school or schoolwork;

d. have a low self concept, evidence little satisfaction with self, and exhibit characteristics of social immaturity; and
e. are either hostile and unruly or passive and apathetic.

3. Other Characteristics

a. are sixteen to seventeen years of age and are older than classmates at the time they leave school;
b. are members of low income families in which neither parent finished high school;
c. are from weak or broken homes;
d. are not encouraged by parents to stay in school or are actually encouraged by them to leave school to contribute to family support;
e. tend to be members of a minority group;
f. display excessive absenteeism or irregular attendance; and
g. do not participate in extracurricular activities.

Combs and Cooley (1968) analyzed the average earnings of dropouts basing the comparisons on income earned the year after what would have been the dropout's year of graduation. They found that the average annual earnings of dropouts were slightly higher than those of high school graduates who did not go on to college. Analyzing longitudinal data, Redfering and Cook (1980) found that when looking at dropouts twenty years later, their annual earnings of dropouts were significantly lower than those of high school graduates.

Mertens (1982) conducted an extensive study of the characteristics of dropouts. She identified affective, cognitive, and family characteristics as well as looking at family SES, language and religious orientation. Her study also reviewed contextual variables, and school and demographic characteristics.

Dropouts themselves have frequently cited conflicts with teachers and other school personnel as primary reasons for leaving school early (Dye, Ruling, and Tanaka, 1968; Novak and Dougherty, 1979; Watson, 1976). Novak and Dougherty (1979) reported that early (elementary level) indicators of

potential dropouts included low self-esteem. Low self-esteem on the part of students seems to lead to fear of academic failure. Bachman, Green and Wirtanen (1971) believed that students' concept of their own school ability was one of six variables that accounted for 30 percent of the variance in educational attainment. Dropouts tended to be immature, suggestible, easily distracted and to have had difficulty identifying with other people; and, among persons who felt some control over their destinies, the dropout rate was lower than among those who expressed feelings of alienation and inadequacy (Mertens, 1982, p. 26).

The picture of a dropout presented by the National Advisory Council on Supplementary Centers and Services (1975) was one who was often disruptive and who showed hostility towards adults and authority figures. Bachman, Green and Wirtanen (1971) reported that the likelihood of dropping out was greater among those individuals who had a high need for independence and among those who were aggressive. Sharp and Richardson (1979) concluded that dropouts left school because they had problems with school itself. Often each student withdrawal was due to lack of interest in a particular curriculum (National Advisory Council, 1975). Students also reported the failure to see the relevance of education to life experiences (Novak and Dougherty, 1979). It seems, therefore, that students leave our schools because they find it dull and boring!

Until it is possible to adjust statistically for student characteristics prior to vocational tracking, this researcher believes that it is impossible to conclude that a vocational education reduces dropping out. But this does not mean that an analysis of vocational dropout will not produce significant and generally valuable findings. For example, Novak and Dougherty (1979) suggested that dropouts lack a future goal orientation while Sharp and Richardson (1977) found that 41% of the dropouts in their

study had conferred with no one about their future. Concerning cognitive characteristics, Lloyd (1978) documented differences in cognitive abilities such as reading, arithmetic, and language-skill achievement. Other studies have also confirmed this relationship between low reading ability and dropping out.

## SECTION TWO: KANSAS CITY, MISSOURI SCHOOL DISTRICT — VOCATIONAL TECHNICAL CENTER

### CHAPTER FIVE: GENERAL FINDINGS

These general findings are divided into four sections: record-keeping problems, building problems, reasons for attending the Vo-Tech School, and problems with the Vo-Tech School. The findings are presented without extensive discussion. Most are factual and need little amplification while others are discussed elsewhere in this research report.

The findings were obtained from a year-long review of student records, interviews with Vo-Tech teachers, counselors, administrators and staff. Student interviews were conducted with Vo-Tech students, general program students and dropouts. Follow-up studies were conducted by the researcher teams were to validate all conclusions and recommendations.

#### Record-keeping Problems

1. Although, unfortunately, based on incomplete figures, Vo-Tech records show a dropout rate of 33-35%. These dropout figures seem extremely high until the actual term "dropout" is defined.
2. All too often, dropout figures also reflect the adult programs or adult population in combination with the high school population.

3. The term "dropout" is unclearly defined and includes students who were dropped from the roles because of a) non-attendance, b) employment, c) administrative withdrawals. Therefore, dropouts for the purpose of this study did not include transfers to the home school or students moving out of district.
4. This record-keeping problem related to these figures could have been rectified in-house when these extremely high figures were first published if the building administration had been willing to do so (possibly the two unfilled assistant principalships cause some of this problem).
5. Both counselors and principals needed to expend the time and/or effort to understand the extent and causes of this dropout problem.
6. If all information were available and the so-called student enrollment cards were clearly labeled before being sent to the central office for entering into the computer system, a 10-15% reduction in the percentages would result.

Building Problems

1. Insufficient transportation to and from home school is a serious problem that needs to be addressed.
2. Attendance and Tardiness: Policies need to be modified to regulate and to regularize.
3. Obsolete equipment and the lack of supplies is a problem for teachers and students in some classrooms.
4. There is a general undertone of discontent among staff members with the lack of support by the district school board and lack of support by the administration regarding discipline practice.
5. Many staff members perceive a general lack of community support and involvement for the vocational program.

6. Poor communications especially between counselors and less than effective recruitment efforts between the Vo-Tech School and sending schools needs to be corrected.
7. The district has built a sound academic basis for the school by providing individualized instruction, attainable goals and objectives, remedial programs, etc., to reinforce basic skills. However, until all the other "housekeeping" or management functions have been brought under control, the academic programs will continue to suffer and the actual development of the students will not improve.

Reasons for Attending Kansas City Vocational-Technical School (in order of perceived importance to students)

1. Students felt the Vo-Tech School was a "safe place" in comparison to their home school environment.
2. The Vo-Tech School was recommended by friends and relatives because it is "fun."
3. Attendance requirements are linked in some manner to part-time jobs for students.
4. The Vo-Tech Schools provided an education in an area of high job opportunities.

Problems with Kansas City Vocational-Technical as Noted by Students (in order of perceived importance to students):

1. Up-dated materials, supplies and equipment are needed.
2. There are obsolete programs and other programs are not cost effective.
3. Transportation to and from the Vo-Tech Center, whether by metro or district service is inadequate.

4. Summer school programs in high demand areas are needed.
5. Discipline, i.e., lack of structure, rules or enforcement, is not adequate.
6. Administrative leadership needs to be enhanced by various means.
7. Attendance and tardiness are too prevalent.
8. There is a lack of community/district support for the Vo-Tech Center.
9. "I was placed in vocational program I didn't want because my first choice was 'closed out'."

## CHAPTER SIX: SUGGESTIONS FOR IMPROVEMENT

1. Improve Record Keeping: Accurate classification and follow-up are important if school is to keep accurate records and are thus accountable for results, e.g., divide current students into high school and post-high school; or, possibly, court-appointed versus non-court-appointed.
2. Define Dropout: Define the term dropout. This will clarify the associate terms thus improving communications between central office and building-level administrators and avoid poor classification practices by district personnel.
3. Improve Home School Counselor to Vo-Tech Counselor Contacts: Contact between home school and the Vo-Tech school is imperative when trying to provide: (a) adequate information about programs to prospective students, and (b) in developing recruitment program by the vo-tech school. Home school counselors from each high school could also be called upon to serve as an advisory committee to address such problems as "dropouts."
4. Don't Penalize by Pupil Accounting Methods: Provide a district policy which does not penalize the home school (i.e., staff reduction) for sending students to the Vo-Tech School. In this way, "numbers don't become more important than learning."
5. Coordinate School and Transportation Schedules: With a coordinated school and transportation schedule, students will not (a) leave home school classes early or return late, (b) lose credit for time in transit.
6. Avoid Pre-Screening: Provide a pre-screening process either at the home school or Vo-Tech School to eliminate students: (a) who are looking for a "good time," (b) who do not have qualifications

necessary for the vo-tech program. This would include the right to refuse court-appointed students or others referred by the District Board.

7. Provide Alternatives: Alternatives for students who desire high demand classes need to be considered by: (a) providing closely related classes, (b) providing extra sections of these classes either during the day, at night or during the summer. This implies that those classes which are not in demand may be dropped in favor of more desirable ones.

8. Develop Building Policies: Since the Vo-Tech School is unique in regard to its environment, develop building level guidelines for attendance and discipline which will promote a positive educational climate.

9. Involve Other Districts: Provide opportunity for students outside the Kansas City School District to attend and thus better utilize facilities and staff. The Vo-Tech School has several outstanding programs that could draw non-Kansas City students.

10. Improve Public Relations: Become a positive asset to the Kansas City School District rather than being its "armpit" (as it was disparagingly referenced) by (a) providing recognition programs for outstanding students and staff achievement, (b) providing more informed communications between vo-tech school, the home school, parents and the board of education. (c) obtaining coverage of its programs and/or facilities by local media for positive accomplishments.

11. Coordinate In-House Programs: Better coordination between vocational program areas so students will receive necessary instruction. (Example: Students who leave the child care class to go to remedial math will not end up in bathrooms smoking and listening to music.)
12. Encourage Positive Staff - Administration Relations: Work to develop a positive relationship between administration and staff. The often overheard comment was, "it's been suggested, talked about, but nothing ever changes."
13. Hire a Social Worker/Counselor: Provide an individual whose main function is providing help and information to students and family of the potential dropout.
14. Take the Initiative: Develop incentives for the staff and administration to solve problems "in-house." The current dropout problem had already been recognized by building personnel but there was little initiative to investigate or remediate the problem.
15. Better Utilize Job Placement: A major asset of the Kansas City Vo-Tech School is its ability and willingness to find jobs for current/prior students. Many jobs remain unfilled because students do not take advantage of this service.
16. Refine Open Enrollment: Open enrollment is a positive element for the school; however, it does add to the dropout problem by providing a "holding pattern" for students between jobs.

# APPENDIX A:

## ACTION STEPS FOR STATE AND FEDERAL VOCATIONAL EDUCATION DEPARTMENTS

Lydecker (1983, pp. 27-32) suggested an agenda for improving vocational education in comprehensive high schools. She used seven dimensions to focus this change agenda: (1) administrative leadership; (2) curriculum; (3) teachers; (4) facilities and equipment; (5) integration with the academic curriculum; (6) research and evaluation; and (7) community outreach. These realistic suggestions could provide an excellent basis for improving vocational education in the urban school district. It would not be unrealistic for state vocational departments with the encouragement of the U.S. Department of Education's vocational education establishment to require the following suggestions as planning bases for all urban districts:

Administrative Leadership Steps

1. Base planning on actual programmatic needs rather than simply on the requirements for compliance with federal and state laws and regulations.

2. Develop a statewide plan for program improvement in the comprehensive high school, with specific responsibilities assigned to state, regional and local administrators. Whenever possible, accomplish planning at the point of program delivery.

3. Provide the means for guidance counselors to make frequent visits to business and industry, and for the continuous flow of timely and accurate career and jobs information.

4. Guide students into the vocational system by providing career exploration from an early age. Guide students out of the system by helping them find appropriate jobs or postsecondary programs.

5. Consider tying the salaries of administrators, teachers and other staff members to measurements of their effectiveness.

6. Initiate an "excellence recognition program" to honor teachers, administrators and students who exhibit outstanding performance.

7. Create incentives for improving student and teacher attendance. These can include awards, extra credit for students and an offer to pay teachers for a certain number of unused sick days.

8. Require principals and other school administrators to take courses in vocational education philosophy and high technology as part of their certification or in-service requirements.

9. Provide regular in-service meetings and technical assistance for local administrators and teachers, and train them in the use of state-of-the-art equipment.

10. Establish flexibility in opening and closing programs in order to respond more effectively to changes in student needs and labor market demands. Strategies may include hiring some teachers on a part-time or short-term basis, retraining teachers, attracting a new clientele, or offering programs jointly with other educational institutions.

The Curriculum

1. Establish programs of excellence by allowing teachers to manage the learning experience and providing high-quality facilities and equipment.

2. Write an individual education plan, identifying proficiencies to be mastered, for each vocational student. Then determine where the skills can be obtained in the total curriculum, including both academic and vocational courses.

3. Mix and balance the curriculum to include several emphases: occupational skills, basic skills, world of work knowledge, job seeking expertise and the development of work values and attitudes.

4. Implement a competency-based instructional program.

5. Develop specific standards of program excellence for the entire school, and make sure all teachers are adhering to the same standards.

6. Offer a sufficient number and range of vocational courses so that students can obtain intensive preparation in a chosen specialty. When resources or enrollments are inadequate to justify starting a new program within the school, collaborate with industry and other educational institutions to offer equivalent training opportunities to students.

7. Establish high performance standards for all students, vocational and academic. Consider requiring that each student have a marketable skill in order to graduate.

8. Evaluate the need for increasing the total credit or time requirements for various vocational programs, or establishing minimum time blocks of three hours for instruction.

9. Operate summer institutes for intensive vocational instruction to disadvantaged, handicapped or advanced students.

The Teachers

1. To solve recruitment problems, consider diverting resources from other areas to offer higher base salaries or merit bonuses for outstanding teachers.

2. Involve all teachers in developing long-range plans for in-service training and other needs. Encourage teachers to become knowledgeable about high technology and the effective use of research findings in the classroom.

3. Require every vocational teacher to complete a paid summer internship in industry every five years.

4. Find ways for vocational teachers to become leaders in teaching other school staff about the educational implications of the new technology.

5. Provide recognition and financial rewards for good instruction.

6. Train administrators to be more sensitive to the importance of good instruction in the vocational classroom.

7. Train and hire more vocational generalists rather than those with narrow, job-specific training.

8. Implement a career ladder plan that distinguishes among beginning instructors, experienced teachers and master teachers.

Facilities and Equipment

1. Construct or select facilities of adequate size that possess the flexibility to meet future program needs. Make sure they are attractive, clean and well maintained.

2. To make maximum use of equipment, enroll adults in weekend and evening courses, design courses for postsecondary students when appropriate, or offer special courses to secondary students after school hours.

3. To avoid purchasing expensive but needed equipment, explore the possibility of leasing arrangements or donations from government or industry, sharing equipment with other schools, or contracting with private companies to use their equipment on site.

4. Donate or sell surplus equipment to another educational institution that needs it. The state should be responsible for transferring equipment it owns from one program to another.

5. Form a regional or statewide information network that inventories all equipment in each vocational program and use for exchange or sale of equipment.

6. Seek equipment donations from vendors for pilot programs, with a promise to publicize such acts of generosity.

Integration with the Academic Curriculum

1. Improve the relationship and integration of vocational and academic instruction.

2. Identify the existing goals of academic and vocational curriculums. Then list the goals they hold in common and plan how to reach them.

3. Develop a detailed action plan, with timelines, for increasing collaboration between vocational and academic education.

4. Identify science, math and language skills needed in each vocational program.

5. Encourage academic teachers to reinforce the content of vocational courses in teaching basic skills. Identify vocational materials that could be covered in mastering such skills.

6. Offer vocational staff assistance to academic instructors in developing new performance standards.

7. Through workshops and other means, improve the skills of vocational teachers in teaching and reinforcing academic skills in their programs.

Research and Evaluation

1. Encourage wider dissemination of research through training administrators and teachers as research users.

2. Support the development of more descriptive research on vocational education, so that program improvement plans will be based on actual circumstances in the classroom.

3. Work to increase the application of general education research (examples: research on effective schools, time on task, cognitive processes) to vocational education.

4. Include evaluation as an integral part of every vocational program, not just pilot programs that require it. Use the findings to improve future programs.

5. Monitor student progress through frequent testing, with an emphasis on early identification and remediation of deficiencies.

6. Do follow-up studies of vocational students several years after graduation to find out their current employment or educational status, level of earnings, and whether they believe their vocational programs were beneficial.

7. Find an assessment instrument that will identify community and school needs. Use the results to help direct activities of the vocational advisory committee.

Community Outreach

1. Develop a blueprint for action to encourage working relationships with business and industry, government agencies, the state legislature, postsecondary and other secondary institutions, the media and other important segments of the community. For maximum accountability, assign a person or team to carry out the blueprint and evaluate its effectiveness.

2. Consult with business leaders to make vocational programs more cost effective.

3. Bring the community into school vocational programs through class visits, open house and career fairs. Recruit community volunteers to work in vocational programs.

4. Move the school into the community by setting up an exhibit in a shopping mall or other central location, or organizing a speakers' bureau made up of vocational and academic teachers.

5. Allow students the option of dual enrollment in the home school and another institution, secondary or postsecondary, in order to gain more intensive training.

6. Use legislative lobbying and media relations to develop community-wide advocacy for vocational education. Let students help market programs through scheduling Guest Days when they can bring their friends to class.

7. Put your advisory committee to work validating proficiency standards, evaluating programs, testing student competencies and arranging internships for teachers.

8. Establish workshops to familiarize vocational educators with available community resources.

9. Ask local industries for loan personnel to teach technical concepts in the school or at the work site.

# APPENDIX B:

## BUSINESS/INDUSTRIAL COOPERATION WITH VOCATIONAL CAREER EDUCATION

Business and industry has always provided various materials, personnel, and activities in support of vocational and career education. Jung and Steel (1981, p. 11) have summarized such support looking at materials, resource persons, equipment, work experience and exploration, funds, the role of education and the role of business and industry. The following are their specific actions to facilitate business and industrial cooperation with vocational educators. These recommendations form the basis for an agenda which both vocational educators and the business community can use to focus their cooperative effort thus avoiding what can and has led to conflicting and unproductive results in joint efforts which were initiated to be mutually beneficial.

1. Materials:
   a. Distributing brochures describing organizations and employment opportunities
   b. Showing films describing industry in general (e.g., careers in science and technology)
   c. Showing films on economics and role of private enterprise
   d. Utilizing mobile vans to provide short courses on particular fields (e.g., fossil fuels)
   e. Providing instructional aids (e.g., workbooks) to accompany films
   f. Developing special curricula (including objectives and materials) on industries or careers for infusion into academic programs
2. Resource persons
   a. Providing classrom speakers on an occasional basis
   b. Sending representatives for career fairs and career days
   c. Providing employees who teach special units in classes (e.g., on business occupations)
   d. Providing sponsors for Junior Achievement programs and activities

3. Equipment

   a. Donating equipment and materials for use in schools (e.g., typewriters, calculators)

   b. Underwriting costs of facilities or equipment

4. Work Experience and Exploration

   a. Developing summer jobs programs

   b. Developing cooperative and work study programs

   c. Establishing programs in association with CETA Private Industry Councils

   d. Setting up tours of plants and facilities

   e. Providing summer workshops for teachers and counselors to develop on-the-job expereince

   f. Inviting students to attend company functions (e.g., shareholders' meetings)

5. Funds:

   a. Awarding grants through company-sponsored foundations to local education agencies

   b. Providing awards for achievement or talent searches

   c. Underwriting costs of equipment or special resource persons for schools

   d. Underwriting costs of materials development and dissemination efforts

   e. Underwriting costs of student or teacher participation in special enrichment programs (e.g., summar arts institute, summer college program on science and technology)

   f. Establishing Adopt-a-School program participation

6. Role of Education:

   a. Reorganizing restrictive scheduling, curricular, and credit patterns

   b. Assigning full-time work-study coordinators

   c. Broadening both scope and intensity of such programs

   d. Using total community resources--other social service agencies as well as business and industry

7. Role of Business and Industry:

   a. Providing appropriate work situations
   b. Providing other services as needed.

APPENDIX C: Kansas City Vo-Tech Summary Dropout Statistics

High School Students:

Juniors and Seniors

| Course | Number | Reason |
|---|---|---|
| 1) Child Care Service | 3 | W/D |
| | 5 | Other |
| 2) Data Entry (Key Punch) | 6 | W/D |
| | 6 | Other |
| 3) Auto Body & Fender Repair | 4 | W/D |
| | 16 | Other |
| 4) Clerical Practice | 5 | W/D |
| | 13 | Other |
| 5) Data Processing | 3 | W/D |
| | 12 | Other |
| 6) Welding | 3 | W/D |
| | 2 | Other |
| | 2 | Adm. W/D |
| 7) Laundry & Dry Cleaning | 5 | Other |
| | 5 | W/D |
| 8) Electricity | 4 | W/D |
| | 15 | Other |
| 9) Appliance Repair | 1 | Other |
| | 1 | W/D |
| | 1 | Adm. W/D |

| Course | Number | Reason |
|---|---|---|
| 10) Secretarial Practice | 1 | W/D |
| | 4 | Other |
| 11) Climate Control | 1 | Other |
| 12) Health Occupations | 1 | Other |
| | 15 | W/D |
| 16) Radio & TV Repair | 5 | W/D |
| | 6 | Other |
| 17) Comm. Motor Vehical Repair | 4 | Other |
| | 2 | W/D |
| 18) Graphic Arts | 5 | Other |
| | 5 | Other |
| 19) Commercial Arts | 6 | Other |
| | 11 | W/D |
| 20) Drafting | 3 | W/D |
| | 4 | Other |
| 21) Dressmaking/Tailoring | 4 | Other |
| | 5 | W/D |
| 22) Cosmetology | 8 | W/D |
| | 2 | Other |
| 23) Culinary Arts | 7 | W/D |
| | 4 | Other |
| | 1 | Adm. W/D |
| 24) Machine Tool Technology | 2 | W/D |
| | 3 | Other |
| 25) Auto Mobile Mechanics | 9 | Other |
| | 15 | W/D |

| Course | | Number | Reason |
|---|---|---|---|
| 26) Industrial Sewing | | 3 | W/D |
| | | 1 | Other |
| 27) Practical Ed. Now | | 1 | Other |
| | | 1 | W/D |

| | | | |
|---|---|---|---|
| Sub-Totals | W/D | 117 | 46.6% |
| | Adm. W/D | 4 | 1.6% |
| | Other | 130 | 51.8% |
| TOTAL | | 251 | |

## Post-High School Students

| Course | Number | Reason |
|---|---|---|
| 1) Secretarial Practice | 5 | W/D |
| 2) Welding | 3 | W/D |
| | 1 | W/D |
| 3) Data Processing | 3 | W/D |
| 4) Child Care | 3 | W/D |
| 5) Data Entry | 5 | W/D |
| | 1 | Other |
| 6) Electricity | 7 | W/D |
| | 1 | Other |
| 7) Auto Body & Fender Repair | 3 | W/D |
| | 1 | Other |
| 8) Clerical Practice | 2 | W/D |
| 9) Laundry & Dry Cleaning | 1 | Other |
| | 1 | W/D |
| 10) Drafting | 12 | W/D |
| 11) Cosmetology | 4 | W/D |
| | 3 | Other |
| 12) Commercial Art | 9 | W/D |
| | 1 | Other |

| Course | Number | Reason |
|---|---|---|
| 13) Health Occupations | 1 | W/D |
| 14) Comm. Motor Vehicle Repair | 1 | Other |
| | 3 | W/D |
| 15) Radio & TV Repair | 3 | W/D |
| 16) Graphic Arts | 3 | W/D |
| 17) Industrial Sewing | 3 | Other |
| | 8 | W/D |
| 18) Automobile Mechanics | 5 | W/D |
| | 1 | Other |
| 19) Dressmaking/Tailoring | 1 | W/D |
| 20) Culinary Arts | 2 | W/D |
| | 1 | Other |
| 21) Machine Tool Technology | 1 | W/D |

| | | | |
|---|---|---|---|
| Sub-Totals | W/D | 84 | 84.9% |
| | Other | 15 | 15.1% |
| TOTAL | | 99 | |

| | | |
|---|---|---|
| TOTALS | 251 | High School |
| | 99 | Post-High School |
| | 350 | |

| | | | |
|---|---|---|---|
| Adm. Withdrawal | 4 + 0 = | 4 | .3% |
| W/D | 117 + 84 = | 201 | 57.4% |
| Other | 130 = 15 = | 145 | 41.4% |
| | | 350 | |

NOTE: Approximate number of students (from counselor) was 935

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